

Attorney Docket No. 233-583-USP

REMARKS

This Amendment is being submitted in response to the Examiner's Office action of September 29, 2005. Claims 1-80 are pending. Applicants have amended claims 1-15, 20, 22, 25, 30, 32, 37, 42, 44, 48, 49, 51, and 66. No new matter has been added.

Objection to the Abstract

The Examiner objected to the specification alleging that the abstract inappropriately uses "legal phraseology" because the term "comprises" is used in the abstract. Applicants respectfully traverse this objection. Applicants believe that the term is a commonly used term that is readily understood by those not readily familiar with patent documents. In contrast to the legal terms "means" and "said" that are used in a manner unfamiliar to the general public, the use of the term "comprises" in the abstract is readily understandable to one of the general public that may be unfamiliar with patent documents. Accordingly, Applicants respectfully request that the objection be reconsidered and withdrawn.

Claim Objections

The Examiner objected to claims 13, 15, 48, 49, and 51 because of alleged informalities. With respect to claim 13, Applicants have amended the claim to add the term "Gigabit Interface Converter (GBIC)" to the claim to more fully describe the acronym. No new matter has been added. See, e.g., paragraph [0022] of the specification.

With respect to claim 15, Applicants have amended the claim in order to satisfy the Examiner.

With respect to claim 48, Applicants have amended the claim to add the term "Redundant Array of Inexpensive Disks (RAID)" to the claim to more fully describe the acronym. No new matter has been added. See, e.g., paragraph [0007] of the specification.

With respect to claim 49, Applicants have amended the claim to add the term "Just a Bunch of Disks (JBOD)" to the claim to more fully describe the acronym. No new matter has been added. See, e.g., paragraph [0007] of the specification.

With respect to claim 51, line 1 of the claim is the preamble, which is a non-limiting portion of the claim unless Applicant makes the amendment suggested by the Examiner, and line 2 is the first time that the claim limitation "a packet" is substantively introduced in the claim. Applicants respectfully request the Examiner to reconsider and withdraw the objection.

With respect to claim 66, Applicants have amended the claim to add the term "Flow Control ASIC (FLC)" to the claim to more fully describe the acronym. No new matter has been added. See, e.g., paragraph [0022] of the specification.

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The Examiner also objected to claims 55, 56, 64-66, 69, 70, and 78 as being dependent on a rejected base claim, but indicated that they would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims. For the reasons stated below, however, Applicants believe that each of the claims is now in a condition for allowance. Accordingly, Applicants respectfully request that the objection be reconsidered and withdrawn, and that claims 55, 56, 64-66, 69, 70, and 78 be allowed.

Claim Rejections Under 35 U.S.C. § 102

The Examiner has rejected claims 1, 15, 25, 35, 51-54, 57, 58, 71, 73, and 74 under 35 U.S.C. § 102(e) as being anticipated by United States patent number 6,724,757 B1 issued to Zadikian (the "Zadikian reference"). Applicants respectfully traverse this rejection.

Independent claims 1, 15, and 25, from which claim 35 depends, require a first switch card in communication with a first line card across a first backplane, a second switch card in communication with a second line card across a second backplane, and the second switch card coupled to the first switch card. Thus, base racks each having an independent backplane are connected via the coupled first and second switch cards. As described in the specification, the claimed connection allows base racks each having an independent backplane to be connected without taking up ports of the line cards. The claimed invention further allows for scalably connecting base racks without requiring an additional level of switch hierarchy to be inserted between the switch cards of the base racks.

The Zadikian reference, however, does not disclose, teach, or suggest coupling the first and second switch cards of the first base rack and the second base rack, respectively. Rather, the configuration of the router disclosed in the Zadikian reference requires an additional level of switch hierarchy (see, Main Matrix 214 in Figure 2) disposed between the switch cards of different base racks. The claimed invention, however, requires coupling the first switch card and the second switch card so that individual base racks can be connected in a scalable architecture without requiring the additional level of switch hierarchy. Thus, the Zadikian reference does not disclose, teach, or suggest the switch cards of the base racks being coupled together to allow the base racks to be connected without taking up ports of the line cards of the base racks. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 1, 15, 25, and 35, and that claims 1, 15, 25, and 35 be allowed.

Independent claim 51, from which claims 52-54, 57, 58, 71, 73, and 74 depend, similarly requires transmitting the packet from the first line card through a first backplane to a first switch card of the first base rack, transmitting the packet from the first switch card to a second switch card of a second base rack coupled to the first switch card, and transmitting

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the packet from the second switch card through a second backplane to a second line card on the second base rack. As described above, the transmission of a packet from a first switch card of a first base rack having a first backplane to a second switch card of a second base rack having a second backplane that is coupled to the first switch card allows for the connection of base racks having independent backplanes without taking up ports of the line cards of the base racks and without requiring an additional level of switch hierarchy to be inserted between the switch cards.

As described above, the Zadikian reference, however, does not disclose, teach, or suggest coupling the first and second switch cards of the first base rack and the second base rack, respectively. Rather, the configuration of the router disclosed in the Zadikian reference requires an additional level of switch hierarchy (see, Main Matrix 214 in Figure 2) disposed between the switch cards of different base racks. The claimed invention, however, requires coupling the first switch card and the second switch card so that individual base racks can be connected in a scalable architecture without requiring the additional level of switch hierarchy. Thus, the Zadikian reference does not disclose, teach, or suggest coupling the switch cards of the base racks together to allow the base racks to be connected without taking up ports of the line cards of the base racks. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 52-54, 57, 58, 71, 73, and 74, and that claims 52-54, 57, 58, 71, 73, and 74 be allowed.

Claim Rejections Under 35 U.S.C. § 103

The Examiner has rejected claims 2-9, 16-19, 26-29, and 60 under 35 U.S.C. § 103 as being unpatentable over the Zadikian reference in view of well established teaching in the art. Applicants respectfully traverse this rejection.

To the extent that the Examiner is attempting to take official notice of art not cited in the Office action, Applicants respectfully request that the Examiner provide evidentiary support for the allegations that "it is well known in the art that the switching element comprises 16 line cards, and 4 switch cards, and wherein each line card includes 16 ingress/egress ports." As the Examiner admits, the Zadikian reference fails to disclose the claimed number of line cards, switch cards, and ports. The Examiner does not provide support for the allegation that the claimed number of line cards, switch cards, and ports are known in the art. Nor does the Examiner provide any motivation to modify the teaching of the Zadikian reference to provide the claimed number of line cards, switch cards, and ports.

In addition, claims 2-9, 16-19, 26-29, and 60 depend from independent claims 1, 15, 25, and 51. For the additional reasons described above, Applicants respectfully suggest that claims 2-9, 16-19, 26-29, and 60 are patentable. Accordingly, Applicants request that the

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Examiner reconsider and withdraw the rejection of claims 2-9, 16-19, 26-29, and 60 and that claims 2-9, 16-19, 26-29, and 60 be allowed.

The Examiner has also rejected claims 10, 11, 20, 21, 30, and 31 under 35 U.S.C. § 103(a) as being unpatentable over the Zadikian reference in view of United States patent number 6,427,173 issued to Boucher (the "Boucher reference"). Applicants respectfully traverse this rejection.

Claims 10, 11, 20, 21, 30, and 31 depend from independent claims 1, 15 and 25. For the reasons described above and that the Zadikian reference and the Boucher reference do not disclose each limitation of independent claims 1, 15, and 25, Applicants respectfully suggest that claims 10, 11, 20, 21, 30, and 31 are patentable. Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 10, 11, 20, 21, 30, and 31 and that claims 10, 11, 20, 21, 30, and 31 be allowed.

The Examiner has also rejected claims 12-14, 22-24, and 32-34 under 35 U.S.C. § 103(a) as being unpatentable over the Zadikian reference in view of United States patent number 6,904,053 B1 issued to Berman (the "Berman reference"). Applicants respectfully traverse the rejection.

Claims 12-14, 22-24, and 32-34 depend from independent claims 1, 15 and 25. For the reasons described above and that the Zadikian reference and the Berman reference do not disclose each limitation of independent claims 1, 15, and 25, Applicants respectfully suggest that claims 10, 11, 20, 21, 30, and 31 are patentable. Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 10, 11, 20, 21, 30, and 31 and that claims 10, 11, 20, 21, 30, and 31 be allowed.

The Examiner has also rejected claims 36, 59, 61-63, and 72 under 35 U.S.C. § 103(a) as being unpatentable over the Zadikian reference in view of United States patent number 5,905,725 B1 issued to Sindhu (the "Sindhu reference"). Applicants respectfully traverse the rejection.

Claims 36, 59, 61-63, and 72 depend from independent claims 25 and 51. For the reasons described above and that the Zadikian reference and the Sindhu reference do not disclose each limitation of independent claims 25 and 51, Applicants respectfully suggest that claims 36, 59, 61-63, and 72 are patentable. Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 36, 59, 61-63, and 72 and that claims 36, 59, 61-63, and 72 be allowed.

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The Examiner has also rejected claims 37, 48, and 50 under 35 U.S.C. § 103(a) as being unpatentable over the Zadikian reference in view of United States published patent application number 2005/0050240A1 filed by Wilkins (the "Wilkins reference"). Applicants respectfully traverse the rejection.

Independent claim 37, from which claims 48 and 50 depend, requires a first switch card in communication with a first line card across a first backplane, a second switch card in communication with a second line card across a second backplane, and the second switch card coupled to the first switch card. Thus, base racks each having an independent backplane are connected via the coupled first and second switch cards. As described in the specification, the claimed connection allows base racks each having an independent backplane to be connected without taking up ports of the line cards. The claimed invention further allows for scalably connecting base racks without requiring an additional level of switch hierarchy to be inserted between the switch cards of the base racks.

Neither the Zadikian reference nor the Wilkins reference, however, disclose, teach, or suggest coupling the first and second switch cards of the first base rack and the second base rack, respectively. Rather, the configuration of the router disclosed in the Zadikian reference requires an additional level of switch hierarchy (see, Main Matrix 214 in Figure 2) disposed between the switch cards of different base racks. The claimed invention, however, requires coupling the first switch card and the second switch card so that individual base racks can be connected in a scalable architecture without requiring the additional level of switch hierarchy. Thus, neither the Zadikian reference nor the Wilkins reference disclose, teach, or suggest the switch cards of the base racks being coupled together to allow the base racks to be connected without taking up ports of the line cards of the base racks. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 37, 48, and 50, and that claims 37, 48, and 50 be allowed.

The Examiner has also rejected claims 38-46 under 35 U.S.C. § 103(a) as being unpatentable over the Zadikian reference in view of the Wilkins reference in further view of well established teaching in the art. Applicants respectfully traverse the rejection.

To the extent that the Examiner is attempting to take official notice of art not cited in the Office action, Applicants respectfully request that the Examiner provide evidentiary support for the allegations that "it is well known in the art that the switching element comprises 16 line cards, and 4 switch cards, and wherein each line card includes 16 ingress/egress ports." As the Examiner admits, the Zadikian reference fails to disclose the claimed number of line cards, switch cards, and ports. The Examiner does not provide support for the allegation that the claimed number of line cards, switch cards, and ports are

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known in the art. Nor does the Examiner provide any motivation to modify the teaching of the Zadikian reference to provide the claimed number of line cards, switch cards, and ports.

Claims 38-46 depend from independent claim 37. For the reasons described above and that the Zadikian reference and the Wilkins reference do not disclose each limitation of independent claim 37, Applicants respectfully suggest that claims 38-46 are patentable. Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 38-46 and that claims 38-46 be allowed.

The Examiner has also rejected claim 47 under 35 U.S.C. § 103(a) as being unpatentable over the Zadikian reference in view the Wilkins reference in further view of United States published patent application number 2005/0182838A1 filed by Sheets (the "Sheets reference"). Applicants respectfully traverse the rejection.

Claim 47 depends from independent claim 37. For the reasons described above and that the Zadikian reference, the Wilkins reference, and the Sheets reference do not disclose each limitation of independent claim 37, Applicants respectfully suggest that claim 47 is patentable. Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claim 47 and that claim 47 be allowed.

The Examiner has also rejected claim 49 under 35 U.S.C. § 103(a) as being unpatentable over the Zadikian reference in view the Wilkins reference in further view of United States published patent number 6,658,504 B1 issued to Lieber (the "Lieber reference"). Applicants respectfully traverse the rejection.

Claim 49 depends from independent claim 37. For the reasons described above and that the Zadikian reference, the Wilkins reference, and the Lieber reference do not disclose each limitation of independent claim 37, Applicants respectfully suggest that claim 49 is patentable. Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claim 49 and that claim 49 be allowed.

The Examiner has also rejected claims 67, 68, 77, and 79 under 35 U.S.C. § 103(a) as being unpatentable over the Zadikian reference in view of United States patent number 6,504,820 B1 issued to Oliva (the "Oliva reference"). Applicants respectfully traverse the rejection.

Claims 67, 68, 77, and 79 depend from independent claim 51. For the reasons described above and that the Zadikian reference and the Oliva reference do not disclose each limitation of independent claim 51, Applicants respectfully suggest that claims 67, 68, 77, and 79 are patentable. Accordingly, Applicants request that the Examiner reconsider

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and withdraw the rejection of claims 67, 68, 77, and 79 and that claims 67, 68, 77, and 79 be allowed.

The Examiner has also rejected claims 75, 76, and 80 under 35 U.S.C. § 103(a) as being unpatentable over the Zadikian reference in view of United States patent number 6,542,507 B1 issued to Khacherian (the "Khacherian reference"). Applicants respectfully traverse the rejection.

Claims 75, 76, and 80 depend from independent claim 51. For the reasons described above and that the Zadikian reference and the Khacherian reference do not disclose each limitation of independent claim 51, Applicants respectfully suggest that claims 75, 76, and 80 are patentable. Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 75, 76, and 80 and that claims 75, 76, and 80 be allowed.

The Applicant believes no fees or petitions are due with this filing. However, should any such fees or petitions be required, please consider this a request therefore and authorization to charge Deposit Account No. 50-3199 as necessary.

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CONCLUSION

Claims 1-80 are pending in the application. Applicants believe that the pending claims are in a condition for allowance. Prompt issuance of a Notice of Allowance is earnestly solicited.

If the Examiner should require any additional information or amendment, please contact the undersigned attorney.

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Respectfully submitted,



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